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of these organs, and the perpetuation of the variety necessarily becomes dependent on cuttings, which frequently fail to grow into plants inheriting the peculiarity of the parent stock.

A chemical analysis of the ashes of albino plants would perhaps throw some light on the subject, by showing if the difference in color can be accounted for by a difference in the elements absorbed by the plants ; but, even could this be shown, the question would still remain : "Why should an individual plant refuse, apparently to its own detriment, to absorb something that other plants of the same species find necessary ?"

ARTHUR HOLLICK.

Read at the Meeting of the Torrey Bot. Club, Mch. 11th, 1879.

We find from *NATURE*, Nov. 28, 1878, that a paper was read on this subject by Prof. Church, before the London Chemical Society, in November last. The author had made numerous analyses of white and green leaves of the same age from the same plant, in order to discover whether any difference in their composition could be detected. The leaves were gathered from the maple, holly, ivy, and three exotic plants. White leaves contain more water than corresponding green leaves, whilst the ash of white leaves contains more potash and phosphoric acid, but less lime, especially less oxalate and carbonate of calcium. Nearly sixty per cent. of nitrogen in the white leaves is non-albumenoid, while the green leaves contain thirty per cent. of nitrogen in that state. The author also analyzed a vegetable parasite, the dodder, and its host, the red clover ; he found that the white leaves resemble in composition the parasite, while the host represents the green leaves. The white leaf is therefore, in a sense, a parasite on the green leaf, and owes its existence to its connection with the normal portion of the plant.

W. R. G.

§ 299. **Botanical Notes.**—Dr. L. Rabenhorst has recently retired from the editorship of the *CRYPTOGAMIC JOURNAL*, *Hedwigia*, and is succeeded by the well known Mycologist, Dr. George Winter.—A new quarterly journal devoted to the interests of students of fungi has recently made its appearance. It is called the *Revue Mycologique*, and is edited by M. C. Roumequere, of Toulouse. The first number, which is very interesting, contains an article by the editor on the lichen theory of Schwendener which he condemns ; another article treats of the culture of various species of Agarics in Japan ; and these are succeeded by other articles both original and selected, and notices of new books.—From the beginning of the present year, Prof. A. de Bary assumes the sole editorship of the *Botanische Zeitung*.—To a recent number of the *Science News* Mr. John Robinson communicates an article entitled "The Botrychia not Ferns," in which he states that "It should be more generally known by collectors that *Ophioglossum* and *Botrychium* are not true ferns, and that they should be looked upon rather as fern-allies, for they differ from the *Filices* more than the *Equiseta*, and as much as most *Lycopodia*." As reasons for his conclusions, he cites the differences in the mode of vernation, the difference in the growth of the prothallus, which, in the *Ophioglossaceæ*, takes place under ground—the prothallus being very small, destitute of chlorophyll, and having but few root-hairs, while in the true ferns the case is exactly the reverse. There is a greater

thalloid development in ferns than in the *Ophioglossaceae* and a difference in the evolution of the spores. He would, therefore, place the *Ophioglossaceae* in an order of equivalent value with the *Filices*, but in advance of them in a system of classification, inasmuch as they are in some respects more highly differentiated than the latter. —The *Library Journal* for November contains an article by Prof. Ezra Abbot, of Harvard University, showing to what extent many of our standard works of reference continue to perpetuate the old and erroneous view as to the papyrus (*Papyrus antiquorum*.) For instance in "Adam's Roman Antiquities" we read that this plant was "about ten cubits high, and had several coats or skins above one another, like an onion, &c." In Smith's "Dictionary of Greek and Roman Antiquities," under the article *Liber*, the writer says: "The *papyrus-tree* grows in swamps, &c.," and that "paper was prepared from the *thin coats or pellicles which surround the plant*." Liddell and Scott's Greek Lexicon defines βίβλος as "the *inner bark* of the papyrus." A similar account is given in the Lexicon of Jacobitz and Seiler, Pape, and Rost and Palm's edition of Passow under βίβλος and παπυρός; so also in many encyclopaedias. *e. g.*, the "Encyclopaedia Britannica," and others. This common error of speaking of the *papyrus* as if it were an exogenous plant (and even a *tree*!) has originated from ignorance or forgetfulness of the elements of botany, and the consequent misinterpretation of the passage in Pliny (*Hist. Nat.* xiii. 11-13, al. 21-27), which is our chief source of information about the ancient manufacture of paper from this plant. One of the words Pliny uses to describe the thin strips into which the *cellular substance of the stem* was sliced in making the paper is *philyra*, which strictly denotes the inner bark of the Linden tree (*Tilia*), also used as a writing material. Hence the papyrus has been conceived of by the eminent authorities above cited as an exogen, with its inner and outer bark!

W. R. G.

§ 300. **Epigaea repens**, L.—I found specimens of this plant in full bloom at Princes Bay, S. I., on Saturday, Mch. 1st. I do not know that it has ever been found earlier in this locality.

A. H.

§ 301. **Anychia dichotoma**, Mchx., **not dichotomous**.—I do not know whether attention has already been called to the fact, that the specific name of this plant is really a misnomer, if we take the term, "dichotomy," in its strict scientific signification.

If we examine younger specimens of our *Anychia*, we invariably find every axis terminated by a *flower*, with a branch on each side from *lateral buds below* the apex. Hence this is a plain case of cymose, not of dichotomous ramification. In older specimens, say toward the end of July or in August, when many of these terminal flowers have fallen off, the main stem and many branches appear bifurcated. But I need not repeat that this cannot be called dichotomy, which only occurs when some axis, *at its very apex*, is "cut into two" branches, which may again be divided in the same manner, and so on.

Now, although I commonly agree with those who believe in the